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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,561

05/27/2005

Edward Banks

J3699(c)

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EXAMINER

PALENIK, JEFFREY T

ART UNIT

PAPER NUMBER

4133

MAIL DATE

DELIVERY MODE

11/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/518,561

Applicant(s)

BANKS ET AL.

Examiner

Jeffrey T. Palenik

Art Unit

4133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>14 April 2005</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

Claims 1-18 are presented and represent all of the claims under consideration.

### ***Priority***

This application is the National Stage filing of International Patent Application No. PCT/EP03/05211, filed 12 June 2003. Applicant claims priority to European Patent Office (EPO) Application No. 02254336.7, filed 21 June 2002 and United Kingdom Application No. 0228878.5, filed 11 December 2002. Examiner finds that Applicant's filing meets the priority requirements and determines the earliest effective U.S. filing dates to be 21 June 2002 and 11 December 2002.

### ***Information Disclosure Statement***

An Information Disclosure Statements filed 14 April 2005 is acknowledged and has been reviewed.

### ***Specification***

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Objections***

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. The instant claim 2 cites the limitation of “a hair modifying agent” that “reduces the stiffness of a hair” to the hair conditioning composition of claim 1. Since the limitations of the first claim previously cite water, on which the requirements of claim 2 read, there is no further limitation is placed on the preceding independent claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10, 13 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation “modified by exchange into the clay of cations” renders claim 10 unclear. The language used to describe the modification of the clay does not clearly define what properties are being exchanged into or out of the clay.

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The metes and bounds of the instant claim 13 cannot be precisely determined due to the repeated use of the recitation "mean value" throughout the claim. The variables (e.g. a, b, x, and y) cited in claim 13 that structurally define both of the general formulas (see below), are further defined within the claim by either a defined range or a specific value. However, the claim is rendered indefinite because the values set forth are based on mean values and it is not clear what values were used to calculate said mean values.

Claims 15-18 provide for the use the hydrophobically modified clay composition of claim 15, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 15-18 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd. App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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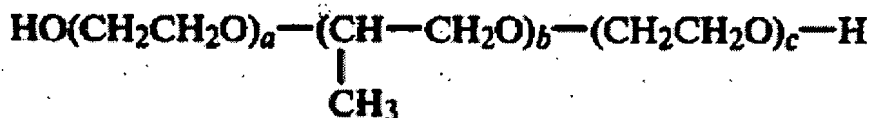
Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maksimoski et al. (U.S. Patent 4,983,383) in view of Guthauser (U.S. Patent 4,384,974) and Borovian (U.S. Patent 4,607,036).

Maksimoski et al. teaches hair care compositions that have hair-conditioning properties (Abstract). Claim 7 teaches the hair conditioning composition with a pH of less than 8. Claims 19 and 21 teach the inclusion of fatty alcohols (i.e. cetyl or stearyl alcohol) between about 0.01% to 10% and between about 0.05% to about 5.0% of a cationic surfactant. Example IV (column 20, line 44) describes the use of distilled water to make the composition. Column 14, lines 11-23, teaches the inclusion of hydrophobically treated clay as an alternative to silicone. However, it is also referred to as a volatile carrier for redispersion of silicone. Functionalized oils such as coconut oil are taught (column 6, line 68). Coconut oil is a hydrocarbon oil derived from long-chain, fatty, carboxylic acids comprising lauric, myristic, palmitic, oleic, linoleic and others (see Vegetable oil, coconut; [www.netrition.com/oils/coconut.html](http://www.netrition.com/oils/coconut.html)). Imidazolidinyl urea is taught as a hair fiber modifying agent or preservative (column 16, line 36) and can be included in the composition ranging from about 0.01% to about 10% by weight. Bentonite hydrophobically treated clay minerals are taught as an expandable, three-layer clay formed by sandwiching a sheet of aluminum/oxygen atoms between two layers of silicone/oxygen atoms and can be modified by exchange (i.e. have an ion exchange capacity) (column 14, lines 41-48). Quarternary, ammonium-containing, cationic surfactants, wherein each of the groups  $R_{1-4}$  are independently alkyl and range from  $C_1$  to  $C_{30}$ , are taught (column 10, lines 6-41). Claim 1 teaches the use of non-rigid silicone gum (0.05% to 10% by weight of the composition). Application of an effective amount of the conditioning composition to the hair is taught (claim

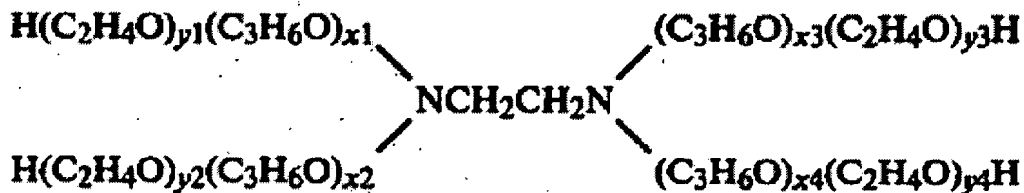
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10, lines 41-42). Claim 16 cites inclusion of multiple surfactants such as nonionic surfactants including polyethylene oxide (column 8, lines 23-40). However, Maksimoski does not teach the inclusion of polypropylene oxide, poloxamers or poloxamines as being part of the surfactant. Maksimoski also does not teach (i) the specific percentage range for the cationic surfactant, (ii) percent of compositional atoms present in the modified clay, (iii) the ratio of the cationic surfactant to the fatty alcohol, (iv) the percentage weight range of silicone, (v) the mean molecular weight of the block copolymer, and (vi) the values (e.g. a, b, x, and y per the instant claims) for the general poloxamer and poloxamine formulas.

Guthauser teaches a stable, cosmetically acceptable, water-in-oil emulsion comprising block polymers of the general formulas for:



poloxamers and



poloxamines (claim 1).

Guthauser further teaches by example, different cosmetic applications that can employ the above compounds together. However, none of the examples is specifically directed toward treating or conditioning the hair.

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Borovian teaches a preservative system used in the preparation of personal care product compositions that contain a conditioning amount of surfactant (Abstract). Claim 4 teaches that the surfactant can be ionic (e.g. cationic), nonionic or a mixture of both. The nonionic surfactant is further defined as including block copolymers of polyoxyethylene and polyoxypropylene as well as non-cyclic quaternary ammonium salts (column 3, lines 26-45).

In view of the combined teachings of the prior art, one skilled in the cosmetic art would have been motivated to prepare a hair conditioning composition comprising nonionic surfactants created using both of the above general poloxamer and poloxamine formulas with a reasonable expectation of eliciting a conditioning effect through application of a sufficient amount of said surfactant. Such would have been obvious in the absence of evidence to the contrary because Maksimoski broadly defines nonionic surfactants as being derived from the condensation of ethylene oxide, propylene oxide and ethylene diamines, wherein the compound contains 40% to 80% polyoxyethylene in the end (column 8, lines 40-60). The inclusion of surfactants of the empirical structures defined by Guthauser will provide a more balanced and pharmaceutically acceptable emulsion that will stabilize the final cosmetic product.

As to the aforementioned ranges and values (i-vi), the adjustment of particular conventional working conditions (e.g. determining result effective amounts of the ingredients beneficially taught by the cited references, especially within the broad ranges instantly claimed), as well as adjusting molecular values in a general formula, is deemed merely a matter of judicious selection and routine optimization, which is well within the purview of the skilled artisan.



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Accordingly, this type of modification would have been well within the purview of the skilled artisan and no more than an effort to optimize results.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey T. Palenik whose telephone number is (571) 270-1966.

The examiner can normally be reached on 7:30 am - 5:00 pm; M-F (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Stucker can be reached on (571) 272-0911. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2966.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeffrey T. Palenik

Patent Examiner



JEFFREY STUCKER  
SUPERVISORY PATENT EXAMINER